## **AMENDMENTS TO THE CLAIMS:**

This listing of the claims below will replace all prior versions and listing of claims in this application.

- 1. (Currently Amended) Use of A method of preparing a resistant starch from water-insoluble linear poly-alpha-1,4-D-glucans as resistant starch (RS) that does not comprise one or more retrogradation steps.
- 2. (Currently Amended) Use The method according to claim 1, characterised in that wherein the water-insoluble linear poly-alpha-1,4-D-glucans were is obtained by the reaction of reacting an aqueous saccharose solution with an enzyme with the enzymatic activity of an amylosucrase.
- 3. (Currently Amended) Use The method according to claim 2, characterised in that wherein the reaction of the aqueous saccharose solution is carried out with an enzyme with having the enzymatic activity of an amylosucrase *in vitro*.
- 4. (Currently Amended) Use The method according to claim 2, characterised in that wherein the reaction of the aqueous saccharose solution is carried out with an enzyme with having the enzymatic activity of an amylosucrase in planta.
- 5. (Currently Amended) Use The method according to one of the claims 1 to 4 claim 1, characterised in that wherein the water-insoluble linear poly-alpha-1,4-D-glucans exhibit an RS content determined by the method of Englyst et al. of more than 70 wt.%.
- 6. (Currently Amended) Use The method according to one of the claims 1 to 5 claim 1, characterised in that wherein the water-insoluble linear poly-alpha-1,4-D-glucans exhibit a DSC peak temperature of between 95 °C and 125 °C.

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7. (Currently Amended) Use The method according to one-of-the claims 1 to 6 claim 1, eharacterised in that wherein the water-insoluble linear poly-alpha-1,4-D-glucans have a mean molecular weight of  $1 \times 10^2$  g/mol to  $10^5$  g/mol.

- 8. (Currently Amended) Use The method according to one of the claims 1 to 6 claim 1, characterised in that wherein the water-insoluble linear poly-alpha-1,4-D-glucans have a mean molecular weight of  $1 \times 10^3$  g/mol to  $3 \times 10^4$  g/mol.
- 9. (Currently Amended) Use The method according to one of the claims 1 to 6 claim 1, characterised in that wherein the water-insoluble linear poly-alpha-1,4-D-glucans have a mean molecular weight of  $2 \times 10^3$  g/mol to  $1.2 \times 10^4$  g/mol.
- 10. (Canceled)
- 11. (New) The resistant starch produced by the method of claim 1.
- 12. (New) The resistant starch of claim 11, wherein the water-insoluble linear poly-alpha-1,4-D-glucans exhibit an RS content of more than 70 wt.%.
- 13. (New) The resistant starch of claim 11, wherein the water-insoluble linear poly-alpha-1,4-D-glucans exhibit a DSC peak temperature of between 95 °C and 125 °C.
- 14. (New) The resistant starch of claim 11, wherein the water-insoluble linear poly-alpha-1,4-D-glucans have a mean molecular weight of 1 x  $10^2$  g/mol to  $10^5$  g/mol.
- 15. (New) The resistant starch of claim 11, wherein the water-insoluble linear poly-alpha-1,4-D-glucans have a mean molecular weight of 1 x  $10^3$  g/mol to 3 x  $10^4$  g/mol.
- 16. (New) The resistant starch of claim 11, wherein the water-insoluble linear poly-alpha-1,4-D-glucans have a mean molecular weight of  $2 \times 10^3$  g/mol to  $1.2 \times 10^4$  g/mol.

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- 17. (New) A method for the preparation of resistant starch comprising:

  a) preparing an aqueous saccharose solution;

  b) converting the aqueous saccharose solution with a protein having the enzymatic properties of an amylosucrase into water-insoluble linear poly-alpha-1,4-D glucans; and optionally

  c) isolating the water-insoluble linear poly-alpha-1,4-D-glucans.
- c) isolating the water-insoluble linear pory-alpha-1,4-D-glucans.
- 18. (New) The method according to claim 17, wherein the reaction of the aqueous saccharose solution is carried out with an enzyme having the enzymatic activity of an amylosucrase *in vitro*.
- 19. (New) The method according to claim 17, wherein the reaction of the aqueous saccharose solution is carried out with an enzyme with the enzymatic activity of an amylosucrase in planta.